

## Book Reviews

### **Beta-agonists in the Treatment of Asthma**

J. F. COSTELLO AND R. D. MANN, eds.

Carnforth, Lancashire: Parthenon, 1992, 158 pages, £38.

This book represents the proceedings of a symposium entitled 'Beta-agonists in Asthma: State of the Art' held at the Royal Society of Medicine in London in February 1992. Presentations by ten distinguished speakers at this meeting provide the basis for the chapters, each of which is accompanied by a transcript of the related discussion and list of references. The book starts with discussion of relatively fundamental areas including the molecular pharmacology of beta-adrenoceptors and mechanisms of action of beta-agonists. Compared with later chapters these are less likely to be meaningful to the average respiratory physician but there are some interesting points made which merit consideration by clinicians. For example, it is probably not widely appreciated that beta-agonists selectively stimulate mucous rather than serous cells of bronchial submucosal glands so that high doses of beta-agonists may bring about a viscous mucus secretion.

Subsequent chapters discuss the influence of beta-agonists on airway inflammation in asthma, and evidence relating to possible adverse effects of beta-agonists including the association of their increased use with asthma deaths. One of the attractions of this book is that it brings into focus areas of controversy in a field which has provoked much debate. Thus, Dr Sears described his study (*Lancet*, 1990) demonstrating a favourable effect of as required, rather than regular, beta-agonist therapy on clinical asthma. The study is much quoted but the ensuing discussion and subsequent chapters indicated the caution with which these findings are viewed by many, particularly on the basis of the method of presentation of the data and questionable clinical significance of the small improvement in lung function. There is a detailed description of the Saskatchewan case-control study, which acknowledges that a causal relationship is not established in relation to beta-agonist usage and asthma mortality, and those familiar with previous studies of asthma deaths will not be surprised to learn that regular inhaled steroid use was associated with a lower mortality.

Another area in which controversy is brought sharply into focus in this book relates to the postulated rebound increase in airway hyperresponsiveness following regular treatment with beta-agonists. The literature is reviewed in successive chapters by Professor A. Tattersfield and Dr R. Fuller. The former concludes that such an increase in reactivity occurs whereas the latter author claims from much the same body of evidence that there is no overall change. Neither author acknowledges the possible effect of a publication bias in favour of studies with positive findings. Only one author in the book reminds us of what is probably one of the more important findings in relation to beta-agonist usage; over the past decade the threefold increase in prescription rates for beta-agonists in the U.K. has not been accompanied by an increase in asthma mortality rates.

Overall this book, while expensive, provides a compact summary of current points of controversy and uncertainty in an important field.

*Stefan Lozewicz*

### **Chest and Cardiac Imaging – An Atlas of Differential Diagnosis**

R. L. EISENBERG

New York: Raven Press, 1993, 270 pages, \$99.

It is very easy to attempt to provide a comprehensive and easily followed differential diagnosis but quite another matter to do so successfully. In his book, the author has undoubtable succeeded in providing (as he stated in his preface) a 'broad spectrum of radiological patterns involving the heart, lung and mediastinum'. The chapters are presented with topics following each other in natural and logical order. Each group of 'patterns' lists the various possible conditions together with specific imaging findings and relevant comments. The contents cover the possible patterns which might be encountered in the chest. Quite rightly, the emphasis is on plain film findings but where pattern detail is better identified on CT, e.g. interstitial lung disease, this modality is used. For the trainee, these lists provide an excellent way of grouping both common presentations and rarities. For the more experienced, the lists serve to recall the conditions which might be otherwise overlooked.